**OBJECTIVES:** To estimate the budget impact of adding omalizumab to standard therapy (ST) in patients with uncontrolled severe allergic asthma, from the perspective of the Brazilian private health care system, over a 5-year time horizon. **METHODS:** A budget impact model was developed to calculate the budget impact for Brazil, based on local epidemiological and drug cost data. The eligible population was based on the following inputs: 2013 population estimate (age ≥6 years): 183 million; prevalence of asthma: 10%; proportion of patients diagnosed and receiving treatment: 6.5%; percentage with allergic asthma: 69%; percentage with immunoglobulin E (IgE) ≥30 IU/mL: 78.7%; percentage with uncontrolled, severe disease: 2.4%; proportion of population using the private health care system and medications: 25.1%. For the following years, an annual population growth rate of 1.17% was assumed. Average doses, resource utilization per exacerbation and proportion of patients who respond to omalizumab were obtained from the INNOVATE trial. Direct costs, including omalizumab purchase and the costs of health care consumption related to exacerbations and routine visits. These costs were calculated from the perspective of the private health care payer. Omalizumab uptake was assumed to be 17%, 35%, 55%, 75% and 95% of eligible population for years 1 to 5, respectively. **RESULTS:** The number of patients eligible for add-on omalizumab therapy that met the eligibility criteria was estimated to be around 3,887 in the first year. The annual budget impact of omalizumab was approximately BRL25 million, BRL50 million, BRL77 million, BRL104 million and BRL131 million for years 1 to 5, respectively (BRL1=USD0.492). **CONCLUSIONS:** The budget impact for the private health care system in Brazil of adding omalizumab to ST was approximately BRL131 million at the end of year-5. Considering that the total population using the private health care system in Brazil is around 45.4 million, this represents a relatively small impact on the payer's budget, of BRL2.90 per beneficiary.

**PRS11**

**SYSTEMATIC REVIEW OF THE LITERATURE AND COST MINIMIZATION AND BUDGET IMPACT ANALYSES OF THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) WITH INHALED CORTICOIDS IN BRAZIL**

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**OBJECTIVES:** The prevalence of COPD in Brazil is estimated in 15,8% and it is the fourth cause of hospitalization a in the Brazilian public health system (SUS) in the last 10 years. Until recently only the short-action and long-action $\beta_2$-agonists were distributed to COPD patients by SUS. The aim of this study was to determine the expected consequences on the cost and effectiveness and the budgetary impact of the recent introduction in SUS of budesonide and beclomethasone for the treatment of COPD patients. **METHODS:** Systematic review of the literature and development of a decision analytic model to demonstrate the immediate response to treatment with inhaled steroids and project the results in terms of effectiveness and cost based on current knowledge of the natural history of the disease. The analysis was performed for a hypothetical cohort of adults with forty or more years with COPD GOLD stage II, III or IV. The primary perspective of the study was SUS. Data sources were the medical literature, official published prices of SUS for medicines and DATASUS (SUS database). **RESULTS:** Corroborating the results of other systematic reviews we also did not detect differences in efficacy and safety between budesonide and beclomethasone therefore we performed a cost-minimization analysis. Both steroids reduced the exacerbation rate in about 40%. The annual costs of the treatment with budesonide and beclomethasone were 714,29 and 786,77, respectively. The parameter that led to greater variation in the model was the cost of hospitalizations with ICU stays. The projected budget impact for introduction of inhaled corticoids (50%/50%) for COPD treatment in 2013 is about R$345 million reais. **CONCLUSIONS:** There are no differences in efficacy and safety between the studied inhaled steroids. To achieve about 40% reduction in the exacerbation rate the budget impact for SUS in 2013 would be of approximately R$345 million reais.

**PRS12**

**CLINICAL AND ECONOMIC BURDEN OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN VETERAN PATIENTS IN THE UNITED STATES: A REAL-WORLD EVALUATION**

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**OBJECTIVES:** To evaluate the clinical and economic burden of chronic obstructive pulmonary disease (COPD) in the U.S. veteran population. **METHODS:** Patients diagnosed with COPD (International Classification of Disease 9thRevision Clinical Modification [ICD-9-CM] diagnosis codes 490.xx, 491.xx, 492.xx, 494.xx, 495.xx, 496.xx) were included in this retrospective study (October 1, 2005 - May 31, 2012) conducted using the Veterans Health Administration (VHA) Medical SAS Datasets. Health care resource utilization and costs were assessed for the 12-month follow-up period. Patients' clinical and discharge statuses were examined for the 12-month baseline period. Means and standard deviations were provided for continuous variables. Numbers and percentage were provided for categorical variables. All descriptive statistical analyses were performed using SAS v9.3 software. **RESULTS:** Among all study patients diagnosed with COPD (772,898), major comorbidities during the baseline period included hypertension (27.9%), depressive disorder (6.72%), chronic ischemic heart disease (5.18%) and shortness of breath (4.73%). The most common medications prescribed within 60 days of disease identification were simvastatin (27.45%), lisinopril (20.63%), omeprazole (19.47%) and aspirin (12.19%). In the 12-month follow-up period, 49.61% of patients were prescribed short-acting b-agonists (SABAs) while only 60 patients were prescribed long-acting b-agonists (LABAs). Outpatient visits (99.75%) occurred more frequently than inpatient visits (22.28%). Inpatient ($8,420), outpatient ($8,584) and pharmacy costs ($1,746) combined for a total expenditure of $18,750. **CONCLUSIONS:** Patients were prescribed simvastatin, lisinopril and omeprazole more often within 3 months after disease identification than other medications. Within 1-year post-diagnosis, SABAs were prescribed more often than LABAs as a treatment for COPD.

**PRS13**

**HOSPITALIZATION COSTS RELATED TO PULMONARY HYPERTENSION (PH) AMONG MEDICARE ADVANTAGE OR COMMERCIALLY INSURED PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION (PAH) IN THE UNITED STATES**

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**OBJECTIVES:** Health care cost data for pulmonary arterial hypertension (PAH) are scarce, especially for important morbidity events like hospitalizations, owing to the absence of a unique ICD-9-CM code. This study assessed inpatient costs and length of stay (LOS) among US patients with PAH. **METHODS:** A retrospective analysis was performed using data (January 2007–December 2011) from adult enrollees with Commercial or Medicare Advantage with prescription drug coverage from a large health plan. PAH patients were identified based on both ≥1 medical claim with an ICD-9-CM code for primary pulmonary hypertension (PH) (416.0) or other chronic pulmonary heart disease (416.8), and ≥1 pharmacy claim for a medication indicated for PAH or frequently used in PAH. Patients had to have ≥365 days of enrollment prior to index date (study inclusion) and 180 days during follow-up. Discharge diagnoses being unavailable, the principal diagnosis for each hospitalization was defined as the most frequent primary diagnosis on that hospitalization's facility claims. Total hospitalization costs (inflated to 2011 USD using the CPI-U) and LOS, stratified by payer (excluding dual eligibility) and principal diagnosis, were analyzed with descriptive statistics. **RESULTS:** The 4009 PAH patients (52% female, mean±SD age 60±14 years) incurred 5582 hospitalizations. Hospitalization cost was $34,123±107,005 (mean±SD), and was nearly 3 times higher for hospitalizations with Commercial ($46,118±135,137, n=3322) than Medicare Advantage coverage ($16,319±30,046, n=2244). Average cost was higher for hospitalizations with a principal diagnosis of PH (416.0 or 418.6) than other principal diagnoses ($49,722±181,878, n=878 vs $31,211± 85,821, n=4704). Average LOS was 11.7±20.8 days, and was longer for hospitalizations with Medicare than Commercial coverage (12.8±21.2 vs 10.9±20.4 days), and for hospitalizations with PH as principal diagnosis compared with other principal diagnoses (15.0±30.5 vs 11.1±18.3 days). **CONCLUSIONS:** Long durations and high incurred costs for PH-related hospitalizations reveal the severe morbidity, health care, and patient burden of PAH.

**PRS14**

**ASTHMA-RELATED HEALTH CARE UTILIZATION IN PATIENTS WITH ORAL CORTICOSTEROID-DEPENDENT ASTHMA**

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**OBJECTIVES:** Severe, poorly-controlled asthma affects a minority of asthma patients but accounts for a disproportionately large amount of asthma-related medical expenditures. Based on 2007 NIH (NHLBI EPR-3) guidelines, oral corticosteroids (OCS) are recommended therapy for step 6 management of severe persistent asthma. We sought to better understand asthma-related health care utilization in patients who require frequent OCS. **METHODS:** We examined Thomson Reuters MarketScan claims data (2006-2010) to identify patients aged ≥12 years, continuously enrolled for ≥24 months, with OCS-dependent asthma, defined as ≥3 30-day OCS fills over a 12-month period and a primary asthma diagnosis (ICD-9 493) within 12 months of the first OCS fill. Excluded were patients with COPD including emphysema, cystic fibrosis, acute respiratory failure, and 29 other conditions that may require frequent OCS. Asthma-related health care utilization was examined during the 12-month period following patients' first OCS fill. **RESULTS:** Among the 10,319 patients meeting study criteria, 6,941 (67.3%) were female; the mean (SD) age at first OCS fill was 57.9 (15.9). The most common comorbid diagnoses were allergic rhinitis (n=1,507; 14.6%), chronic sinusitis (n=1,236; 12.0%), pneumonia (n=1,066; 10.4%), and gastroesophageal reflux disease (n=1,036; 10.0%). During 12-month follow-up, patients received a mean (SD) of 6.2 (3.6) OCS fills. OCS was used in conjunction with at least 2 additional asthma medications in 6,671 (64.6%) patients, but only 5,428 (52.6%) received concomitant guideline-recommended treatment with both an inhaled corticosteroid and long-acting beta agonist. Asthma-related hospitalizations and emergency department (ED) visits were experienced by 6.5% (n=673) and 6.9% (n=712) of patients, respectively. The mean (SD) number of asthma-related hospitalizations was 1.4 (1.5), with an average stay of 4.6 days; the mean (SD) number of asthma-related ED visits was 1.2 (0.5). **CONCLUSIONS:** Despite frequent use of OCS and additional asthma medications, this population of patients with asthma experienced high levels of asthma-related hospitalizations and ED visits.

**PRS15**

**COPD PREVALENCE AND COSTS VALUE IN UKRAINE**

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**OBJECTIVES:** Chronic obstructive pulmonary disease is a very important problem for health systems of different countries trough out the world. For Ukraine as for